

# MANUAL

## **DEMOLITION OF STORAGE TANKS (ENDORSEMENT OF EEMUA 154)**

DEP 34.51.90.10-Gen.

December 1994

### **DESIGN AND ENGINEERING PRACTICE**

USED BY

COMPANIES OF THE ROYAL DUTCH/SHELL GROUP



This document is confidential. Neither the whole nor any part of this document may be disclosed to any third party without the prior written consent of Shell Internationale Petroleum Maatschappij B.V., The Hague, the Netherlands. The copyright of this document is vested in Shell Internationale Petroleum Maatschappij B.V., The Hague, the Netherlands. All rights reserved. Neither the whole nor any part of this document may be reproduced, stored in any retrieval system or transmitted in any form or by any means (electronic, mechanical, reprographic, recording or otherwise) without the prior written consent of the copyright owner.

## PREFACE

DEP (Design and Engineering Practice) publications reflect the views, at the time of publication, of:

Shell International Oil Products B.V. (SIOP)  
and  
Shell International Exploration and Production B.V. (SIEP)  
and  
Shell International Chemicals B.V. (SIC)  
The Hague, The Netherlands,  
and other Service Companies.

They are based on the experience acquired during their involvement with the design, construction, operation and maintenance of processing units and facilities, and they are supplemented with the experience of Group Operating companies. Where appropriate they are based on, or reference is made to, national and international standards and codes of practice.

The objective is to set the recommended standard for good design and engineering practice applied by Group companies operating an oil refinery, gas handling installation, chemical plant, oil and gas production facility, or any other such facility, and thereby to achieve maximum technical and economic benefit from standardization.

The information set forth in these publications is provided to users for their consideration and decision to implement. This is of particular importance where DEPs may not cover every requirement or diversity of condition at each locality. The system of DEPs is expected to be sufficiently flexible to allow individual operating companies to adapt the information set forth in DEPs to their own environment and requirements.

When Contractors or Manufacturers/Suppliers use DEPs they shall be solely responsible for the quality of work and the attainment of the required design and engineering standards. In particular, for those requirements not specifically covered, the Principal will expect them to follow those design and engineering practices which will achieve the same level of integrity as reflected in the DEPs. If in doubt, the Contractor or Manufacturer/Supplier shall, without detracting from his own responsibility, consult the Principal or its technical advisor.

The right to use DEPs is granted by SIOP, SIEP or SIC, in most cases under Service Agreements primarily with companies of the Royal Dutch/Shell Group and other companies receiving technical advice and services from SIOP, SIEP or SIC. Consequently, three categories of users of DEPs can be distinguished:

- 1) Operating companies having a Service Agreement with SIOP, SIEP, SIC or other Service Company. The use of DEPs by these Operating companies is subject in all respects to the terms and conditions of the relevant Service Agreement.
- 2) Other parties who are authorized to use DEPs subject to appropriate contractual arrangements.
- 3) Contractors/subcontractors and Manufacturers/Suppliers under a contract with users referred to under 1) or 2) which requires that tenders for projects, materials supplied or - generally - work performed on behalf of the said users comply with the relevant standards.

Subject to any particular terms and conditions as may be set forth in specific agreements with users, SIOP, SIEP and SIC disclaim any liability of whatsoever nature for any damage (including injury or death) suffered by any company or person whomsoever as a result of or in connection with the use, application or implementation of any DEP, combination of DEPs or any part thereof. The benefit of this disclaimer shall inure in all respects to SIOP, SIEP, SIC and/or any company affiliated to these companies that may issue DEPs or require the use of DEPs.

Without prejudice to any specific terms in respect of confidentiality under relevant contractual arrangements, DEPs shall not, without the prior written consent of SIOP and SIEP, be disclosed by users to any company or person whomsoever and the DEPs shall be used exclusively for the purpose for which they have been provided to the user. They shall be returned after use, including any copies which shall only be made by users with the express prior written consent of SIOP and SIEP. The copyright of DEPs vests in SIOP and SIEP. Users shall arrange for DEPs to be held in safe custody and SIOP or SIEP may at any time require information satisfactory to them in order to ascertain how users implement this requirement.

All administrative queries should be directed to the DEP Administrator in SIOP.

NOTE: In addition to DEP publications there are Standard Specifications and Draft DEPs for Development (DDD's). DDD's generally introduce new procedures or techniques that will probably need updating as further experience develops during their use. The above requirements for distribution and use of DEPs are also applicable to Standard Specifications and DDD's. Standard Specifications and DDD's will gradually be replaced by DEPs.

## TABLE OF CONTENTS

1.	<b>INTRODUCTION</b> .....	4
1.1	SCOPE.....	4
1.2	DISTRIBUTION, INTENDED USE AND REGULATORY CONSIDERATIONS .....	4
1.3	DEFINITIONS.....	4
2.	<b>EXTERNAL STANDARD APPROVED FOR USE</b> .....	5
3.	<b>REFERENCES</b> .....	6

## 1. INTRODUCTION

### 1.1 SCOPE

This DEP gives guidance and requirements for the demolition of vertical cylindrical steel storage tanks and is based on EEMUA 154, **which is endorsed in full without amendment.**

This DEP is a revision of the previous publication of the same number dated December 1982.

### 1.2 DISTRIBUTION, INTENDED USE AND REGULATORY CONSIDERATIONS

Unless otherwise authorised by SIPM, the distribution of this DEP is confined to companies forming part of the Royal Dutch/Shell Group or managed by a Group company, and to Contractors nominated by them (i.e. the distribution code is "C" as described in DEP 00.00.05.05-Gen.)

This DEP is intended for use in oil refineries, chemical plants, gas plants, production facilities and supply/marketing installations.

If national and/or local regulations exist in which some of the requirements may be more stringent than in this DEP the Contractor shall determine by careful scrutiny which of the requirements are the more stringent and which combination of requirements will be acceptable as regards safety, environmental, economic and legal aspects. In all cases the Contractor shall inform the Principal of any deviation from the requirements of this DEP which is considered to be necessary in order to comply with national and/or local regulations. The Principal may then negotiate with the Authorities concerned with the object of obtaining agreement to follow this DEP as closely as possible.

### 1.3 DEFINITIONS

The **Contractor** is the party which carries out all or part of the design, engineering, procurement, construction, demolition, commissioning or management of a project or operation of a facility. The Principal may undertake all or part of the duties of the Contractor.

The **Manufacturer/Supplier** is the party which manufactures or supplies equipment and services to perform the duties specified by the Contractor.

The **Principal** is the party which initiates the project and ultimately pays for its design and construction. The Principal will generally specify the technical requirements. The Principal may also include an agent or consultant authorised to act for, and on behalf of, the Principal. The term "Principal" is synonymous with the term "Owner" as used in EEMUA 154.

The word **shall** indicates a requirement. The term "shall" is synonymous with the term "must" as used in EEMUA 154.

The word **should** indicates a recommendation.

**2. EXTERNAL STANDARD APPROVED FOR USE**

The following standard is approved for use, without any Group amendments:

EEMUA 154

### 3. REFERENCES

In this DEP, reference is made to the following publications:

NOTE: Unless specifically designated by date, the latest edition of each publication shall be used, together with any amendments/supplements/revisions thereto.

#### **SHELL STANDARDS**

Index to DEP publications and standard specifications	DEP 00.00.05.05-Gen.
---	----------------------

#### **BRITISH STANDARDS:**

Guidance to owners on demolition of vertical cylindrical steel storage tanks (ISBN 0 85931 054 X)	EEMUA 154 (1989)
---	------------------

*Issued by:*  
*The Engineering Equipment and Materials Users Association*  
*14-15 Belgrave Square*  
*London SW1X 8PS*  
*England*  
*United Kingdom.*